

**TREATMENT OF CENTRAL NERVOUS SYSTEM  
DISEASES BY ANTIBODIES AGAINST GLATIRAMER ACETATE**

**Abstract of the Disclosure**

5 The present invention provides humanized polyclonal and  
humanized monoclonal antibodies directed against an epitope  
on glatiramer acetate, also known as Copolymer 1, Copolymer-  
1, Cop-1 or Cop. Additionally, the subject invention  
concerns a pharmaceutical composition comprising an antibody  
10 directed against an epitope on glatiramer acetate for the  
treatment of a disease associated with demyelination of  
central nervous system axons. Also encompassed by the  
subject invention is a method of treating a subject suffering  
from a disease associated with demyelination of central  
15 nervous system axons. The subject invention further contains  
methods of stimulating remyelination of central nervous  
system axons. In addition, the subject invention provides a  
method of stimulating proliferation of lymphocytes.